

CLAIMS

What is claimed is :

- 5 1. Process comprising rotolining the interior surface of a hollow article with a composition comprising particles of tetrafluoroethylene/perfluoro(alkyl vinyl ether) copolymer and adhesion-promoting powder additive to form a bubble-free adherent undercoat on said interior surface and forming a rotolined bubble-free overcoat of
10 tetrafluoroethylene/perfluoro(alkyl vinyl ether) copolymer on said undercoat, the thickness of said overcoat being at least about 2/3 the thickness of said undercoat, with the proviso that when said copolymer forming said undercoat is unstabilized tetrafluoroethylene(methyl vinyl ether)/perfluoro(propyl vinyl ether) copolymer, said powder additive
15 prevents the formation of bubbles during said rotolining
2. The process of claim 1 wherein the thickness of said overcoat is greater than the thickness of said undercoat.
- 20 3. The process of claim 1 wherein said copolymer in said undercoat is stabilized.
4. The process of claim 1 wherein the thickness of said overcoat is at least about 1.5 mm (60 mils).
- 25 5. The process of claim 1 where in said powder is metal powder.
6. Process for rotolining the interior surface of a hollow article, comprising, adding a composition comprising particles of stabilized tetrafluoroethylene-perfluoro(alkyl vinyl ether) copolymer or unstabilized
30 tetrafluoroethylene/perfluoro(methyl vinyl ether)/perfluoro(propyl vinyl ether) copolymer and adhesion-promoting, non-bubble promoting powder to the interior of said hollow article, said metal powder preventing said unstabilized copolymer from forming bubbles, rotating said article to
35 distribute the composition over said interior surface, heating said article while it is rotating to melt said copolymer particles to form a continuous bubble-free lining comprising said copolymer and said metal powder on said interior surface, and cooling said article, and obtaining as a result thereof said bubble-free lining adhering to said surface.

7. Process of claim 6 wherein the amount of said metal powder is no greater than about 2 wt%
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8. Process of claim 6 and additionally overcoating said lining with said copolymer to give an overcoat with a thickness which is greater than the thickness of said lining.
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9. Process of claim 8 wherein said overcoat has a thickness of at least about 2.5 mm.
10. Process of claim 6 wherein the thickness of said lining is at least about 1.25 mm.
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11. Process of claim 6 wherein said powder is metal powder.
12. Process of claim 11 wherein said metal powder is zinc.
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13. Process of claim 11 wherein said metal powder contains tin.
14. Process of claim 11 wherein said metal powder contains copper.
15. Process of claim 11 wherein said metal powder is a combination of metals.
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16. Process of claim 15 wherein said combination of metals is selected from at least one of the group consisting of brass and bronze.
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17. Process of claim 6 wherein said stabilized copolymer has less than about 80 unstable end groups/ 10^6 carbon atoms in said copolymer.
18. The process of claim 17 wherein said unstable end groups are $-\text{COOH}$, $-\text{CONH}_2$, $-\text{CH}_2\text{OH}$, $-\text{CO}_2\text{CH}_3$, $-\text{CF}=\text{CF}_2$, and $-\text{COF}$.
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19. The lining formed by the process of claim 6.
20. Composition for obtaining a bubble-free, adherent rotolining, said composition comprising particles of stabilized tetrafluoroethylene/

perfluoro(alkyl vinyl ether) copolymer and adhesion promoting, non-bubble promoting powder or particles of unstabilized tetrafluoroethylene/perfluoro(methyl vinyl ether)/perfluoro(propyl vinyl ether) copolymer and adhesion-promoting, non-bubble promoting powder.

21. The composition resulting from the composition of claim 20 after melting and then cooling of said copolymer.